

2230Z 3 DEC 64

S E C R E T

TO : DIRECTOR

FROM :

ACTION:

INFO :

TOR 2354Z 3 DEC 64

ROUTING INT	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

PRIORITY

IN 60778
25X1A
25X1A

TO PRIORITY

INFO

DATE

KEDLOCK

1. FLIGHT NO. 45, ARTICLE 1001, FLOWN THURS. 3 DEC 1964.

3. DURATION: 1:00, TOTAL TIME: 55:10 HRS.

4. MAX SPEED REACHED: 3.1 M. MAX. ALTITUDE 72,000 FT.

5. TIME ABOVE 2.0 M: 0:30 HRS THIS FLT. CORR PREVIOUS
TOTAL: 4:56 HRS.6. TIME ABOVE 2.6 M: 0:20 HRS THIS FLT. CORR PREVIOUS
TOTAL: 0:22 HRS.7. TIME ABOVE 2.8 M: 0:15 HRS THIS FLT. CORR PREVIOUS
TOTAL 0:03 HRS.8. TIME ABOVE 3.0 M: 0:05 HRS THIS FLT. CORR PREVIOUS
TOTAL 0:00 HRS.

9. TIME FROM 0.9 M TO 1.2 M: 5:35 MIN.

10. TIME FROM 1.2 M TO 2.0 M: 9:10 MIN.

11. T.O. WEIGHT 115,000, C.G. 21.7 PERCENT.

12. OBJECTIVES: VEHICLE PERFORMANCE IN ACCELERATION TO MAX

S E C R E T

USAF review(s)
completed.

S E C R E T

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(IN 60778)

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MACH. INS EVALUATION.

13. CONFIGURATION: EXTERNALLY CLEAN SAME AS FOR PREVIOUS TWO FLIGHTS: CAMERA PODS REMOVED; I BAY COOLING SYSTEM RAM AIR SCOOP REMOVED; [REDACTED] INTERNALLY ESSENTIALLY SAME AS TWO PREVIOUS: FCS EQUIPMENT REMOVED TO ASSIST IN GETTING AFT C.G. CONDITION. INS AND COMPUTER REINSTALLED THIS FLIGHT.

25X1

14. ENGINES BOTH Y-Y TYPE. SER. 257 IN LEFT, SER. 211 IN RIGHT. 211 WAS RETAINED IN RIGHT IN LIEU OF 238 NOTED IN TWX OF FLIGHT 44. REASON WAS TO RETAIN HIGHER THRUST OF 211 OVER THAT OF 238. A/B FUEL CONTROL AND PUMP ON 211 WAS REPLACED IN EFFORT TO ELIMINATE A/B FLAMEOUT EXPERIENCED ON PREVIOUS TWO FLIGHTS.

15. TRANSONIC ACCELERATION FAIRLY GOOD AS IN PREVIOUS TWO FLIGHTS.

16. SUPERSONIC ACCELERATION QUITE GOOD. SMOOTH INLET OPERATION ALL THE WAY TO 3.1 MACH, THE MAX REACHED.

17. SLIGHT YAW OSCILLATION STARTED TO DEVELOP AT APPROX 2.95 MACH. THIS WAS REASON FOR TERMINATION OF ACCEL AT 3.1 M. RECORDS WILL BE STUDIED TO DETERMINE CAUSE OF THE YAW EFFECT. COULD BE SAS OR SPIKE HUNTING.

18. CONSTANT 400 KEAS CLIMBOUT TECHNIQUE BEING USED IN THESE TESTS.

19. PILOT REPORTS 23,000 LBS FUEL REMAINING AFTER REACHING 3.1 M.

20. USED MAX OF 35 DEGREE BANK ANGLE IN 180 DEGREE TURN BACK DURING ACCEL. TURN STARTED AT 2.1 M, SPEED INCREASED TO APPROX 2.8 M AT ROLL OUT.

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[REDACTED] (IN 60778)

PAGE THREE

21. LN2 SYSTEMS DEPLETED BY TIME OF ENTERING PATTERN TO LAND.
22. COCKPIT TEMPS APPEARED SATISFACTORY TO BOTH PILOT AND FCO.
23. INS TERMINAL ERROR 8.4 NM NORTH AND 0.5 NM WEST AFTER 80 MINUTES IN NAV MODE.
24. WILL CONDUCT GENERAL INSPECTION OF THE VEHICLE, FUEL TANKS, ETC., FOR HEAT EFFECTS BEFORE NEXT FLIGHT.
25. PLAN TO REINSTALL FCS, MOVING C.G. AHEAD AGAIN, AND GO AFTER MORE PERFORMANCE DATA.

END OF MSG

S E C R E T